

CLAIMS

(45)

1. Method for reducing the allergen activity of rubber latex comprising incorporating an amount of starch in the rubber latex.

2. Method according to claim 1, characterized in that the amount of starch that is incorporated in the rubber latex is such that the allergen activity of said rubber latex is maximally 50%, preferably maximally 40%, more preferably maximally 30%, most preferably maximally 25% of the allergen activity of rubber latex without starch, as measured by a latex ELISA for antigenic proteins.

3. Method according to claim 1 or 2, characterized in that the amount of starch that is incorporated in the rubber latex is such that the allergen activity of said rubber latex is maximally 20%, preferably maximally 15%, more preferably maximally 10%, most preferably maximally 5% of the allergen activity of rubber latex without starch, as measured by a latex ELISA for antigenic proteins.

4. Method according to claims 1-3, characterized in that the starch is a modified starch.

5. Method according to claim 4, characterized in that the modified starch is obtainable by gelatinising the starch in an extruder and subsequently crosslinking the starch with glyoxal.

6. Method according to any of the claim 1-5, characterized in that the starch is potato starch, Tapioca, waxy corn starch or waxy rice starch.

7. Rubber latex having a reduced allergen activity, which latex is obtained by a method as claimed in claims 1-6.

8. Rubber latex article comprising rubber latex according to claim 7, wherein at least the surface contacting the skin of the user is fabricated from the said rubber latex.

Enclosure to letter dated: July 5, 2001
Application No. PCT/NL00/00294

2

9. Rubber latex article according to claim 8 characterized in that the article is a surgical glove.

10. Rubber latex article according to claim 8 characterized in that the article is a condom.

5 11. Rubber latex article according to claim 8 characterized in that the article is an inflatable balloon.

12. Use of starch for reducing the allergen activity of rubber latex.

10 13. Use according to claim 12 characterized in that the starch is a modified starch.

14. Use according to claim 13 characterized in that the modified starch is obtainable by gelatinising the starch in an extruder and subsequently crosslinking
15 the starch with glyoxal.

15. Use according to any of the claims 12-14, characterized in that the starch is potato starch, Tapioca, waxy corn starch or waxy rice starch.

16. Use of rubber latex according to claim 7
20 for the manufacture of rubber latex articles.

17. Use of starch as donning powder for surgical gloves, characterized in that the starch is a granular, low crystalline, preferably non-crystalline, starch.

25 18. Use according to claim 17, characterized in that the low-crystalline starch has a V-type crystal structure.

19. Use according to claim 17 or 18, characterized in that the birefringence of the low-
30 crystalline starch is less than 30%, preferably less than 20%, more preferably less than 10%, and most preferably less than 5% of native starch.

20. Use according to any of the preceding claims 17-19 characterized in that less than 75% of the
35 low-crystalline starch is soluble in cold water.

21. Use according to any of the preceding claims 17-20 characterized in that the starch is selected

Enclosure to letter dated: July 5, 2001
Application No. PCT/NL00/00294

3

from the group consisting of potato starch, corn starch, rice starch, or waxy corn starch.

22. Surgical glove provided with a granular, low crystalline, preferably non-crystalline, starch as a
5 donning powder at least on the surface of the glove to be contacting the skin of the user.

23. Surgical glove according to claim 22, characterized in that the low-crystalline starch has a V-type crystal structure.

10 24. Surgical glove according to claim 22 or 23, characterized in that the birefringence of the low-crystalline starch is less than 30%, preferably less than 20%, more preferably less than 10%, and most preferably less than 5% of native starch.

15 25. Surgical glove according to any of the claims 22-24, characterized in that less than 75% of the low-crystalline starch is soluble in cold water.

20 26. Surgical glove according to any of the preceding claims 22-25, characterized in that the starch is selected from the group consisting of potato starch, corn starch, rice starch, or waxy corn starch.